

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1.-16. (Cancelled)

Claim 17. (New) A method for detecting presence or absence of a prescribed heat exchanger in a motor vehicle, comprising the following steps which are performed during operation of the motor vehicle:

(S1) observing temperature of a heat-exchanger medium and at the same time observing further current operationally relevant parameters of the motor vehicle for a given time window;

(S2) determining an expected time gradient of the temperature of the heat-exchanger medium;

(S3) determining a current time gradient of the temperature of the heat-exchanger medium; and

(S4) detecting the presence of a prescribed heat exchanger based on the expected and the current time gradients of the temperature of the heat-exchanger medium.

Claim 18. (New) The method as claimed in Claim 17, wherein method step (S1) comprises the following substeps:

(S1-1) measuring values of the temperature of the heat-exchanger medium in predefined time intervals and plotting the time profile of these values; and

(S1-2) measuring values of the operationally relevant parameters at predefined time intervals and plotting the time profiles of these values.

Claim 19. (New) The method as claimed in Claim 18, wherein method step (S2) comprises the following substeps:

(S2-1) comparing the plotted current operationally relevant parameters with predefined values;

(S2-2) determining an associated current operating state in accordance with this comparison; and

(S2-3) determining the temperature gradient expected in this current operating state.

Claim 20. (New) The method as claimed in Claim 17, wherein the current temperature gradient is detected in method step (S3) based on the current values of the temperature of the heat-exchanger medium in the time window.

Claim 21. (New) The method as claimed in Claim 17, wherein method step (S4) comprises the following substeps:

(S4-1) comparing the current and expected time gradients of the temperature of the heat-exchanger medium;

(S4-2) taking into account this comparison result with reference to a predefined threshold value; and

(S4-3) transmitting data signals when a prescribed heat exchanger (2) is present.

Claim 22. (New) The method as claimed in Claim 17, wherein method step (S4) comprises the following substeps:

(S4-1) comparing the current and expected time gradients of the temperature of the heat-exchanger medium;

(S4-2) taking into account this comparison result with reference to a predefined threshold value;

(S4-3) incrementing at least one counter in accordance with the comparison result from substep (S4-2);

(S4-4) carrying out method steps (S1) to (S4) until a predefined counter reading is reached; and

(S4-5) outputting data signals when a prescribed heat exchanger is present.

Claim 23. (New) The method as claimed in Claim 17, wherein:

the time window is determined to begin at a first time when at least one operationally relevant parameter reaches a predefined starting threshold value; and

the time window is determined to end at a second time when the same or at least one further operationally relevant parameter reaches the same or a further predefined ending threshold value.

**Claim 24. (New)** An apparatus for detecting the presence of a prescribed heat exchanger in a motor vehicle, comprising:

at least one heat exchanger with a heat-exchanger medium of the motor of the motor vehicle;

at least one measuring device for measuring the temperature of the heat-exchanger medium; and

an evaluation device for evaluating data and for detecting the presence of a prescribed heat exchanger.

**Claim 25. (New)** The apparatus as claimed in Claim 24, wherein the measuring device comprises:

at least one temperature sensor for measuring the temperature of the heat-exchanger medium;

a holding element for holding the temperature sensor; and

a connection device for connection to the evaluation device.

**Claim 26. (New)** The apparatus as claimed in Claim 25, wherein the holding element is connected to the heat exchanger in a non-releasable manner.

**Claim 27. (New)** The apparatus as claimed in Claim 25, wherein the holding element for holding the temperature sensor has a holder which corresponds to said temperature sensor.

**Claim 28. (New)** The apparatus as claimed in Claim 25, wherein the temperature sensor has a predetermined breaking point and is connected to the holding element such that it is rendered permanently inoperable after it is removed from the holding element.

**Claim 29. (New)** The apparatus as claimed in Claim 25, wherein the temperature sensor is a constituent part of an adapter of the connection device.

**Claim 30. (New)** The apparatus as claimed in Claim 25, wherein the adapter and the holding element have corresponding fastening elements which are designed such that they cannot be released following assembly.

**Claim 31. (New)** The apparatus as claimed in Claim 24, wherein the evaluation device comprises:

a memory device for storing values of time profiles of measured values;

a data memory for storing predefined threshold values, operating state data and other data; and

at least one counter.

**Claim 32. (New)** The apparatus as claimed in Claim 31, wherein the evaluation device is a constituent part of an on-board computer of a motor vehicle.

**Claim 33. (New)** The apparatus as claimed in Claim 24, wherein said evaluation device comprises a processor which is programmed to:

determine an expected time gradient of measured temperature of the heat-exchanger medium;

determine a current time gradient of said measured temperature of the heat-exchanger medium; and

detect presence of a prescribed heat exchanger based on said expected and current time gradients.